

AMENDMENT TO THE CLAIMS

1. (Currently amended) A process for removal of SO_2 in off-gases having a temperature of 30-150° C and containing 0.001-1 vol % SO_2 , comprising the steps of:

in which oxidizing the SO_2 is oxidised to H_2SO_4 without the use of an absorption tower by spraying an aqueous solution of H_2O_2 into the off-gas upstream of an aerosol filter to form H_2SO_4 by reaction in the gas phase between SO_2 and H_2O_2 ; and

removing the produced sulphuric acid from the off-gas in the aerosol filter.

2. (Original) A process as in claim 1, in which the off-gas is cooled by evaporation of the water comprised in the solution being sprayed into the off-gas upstream of the filter.

3. (Previously presented) A process as in claim 1, in which a wet electrostatic separator is used in place of an aerosol filter.

4. (Previously presented) A process according to claim 1 or 2, wherein the off-gas has a temperature of 50-120° C and contains 100-1000 ppm SO_2 .